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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/437,764	11/09/1999	LOUIS C. YUN	015685-032/5	8412

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EXAMINER

NGUYEN, STEVEN H D

ART UNIT	PAPER NUMBER
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2665

34

DATE MAILED: 04/30/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/437,764

Applicant(s)

YUN ET AL.

Examiner

Steven HD Nguyen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 February 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-46 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-18, 24-26, 28-35 and 37-41 is/are allowed.
- 6) ☒ Claim(s) 19-23 and 42-46 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Objections

1. Claims 10 and 33 are objected to because of the following informalities:

As claims 10 and 33, lines 6, the acronyms "SU" must be spell out. Appropriate correction is required.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 19-23 and 42-46 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

As claim 19, lines 9, "the received report signal" is vague and indefinite because it is unclear what it referred to report signal of the base station and the other base station.

As claim 42, lines 9, "the first base station", "the first BS and "the SU".

As claim 42, lines 12, "the at least one report signal" is vague and indefinite because it is unclear what it referred to report signal of the base station and the other base station.

There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 19-23 and 42-46 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schorman (USP 5960350) in view of Moore (USP 6075989).

Regarding claims 19 and 42, Schorman discloses (Fig 1-3 and col. 1, lines 5 to col. 7, lines 40) a system comprising a receiving circuit (Fig 2, Ref 60) for coupling to an array antenna of a base station, to receive report signals, at least one of report signal corresponding to a pilot signal associated with the base station and at least one report signal corresponding to a test pilot signal comprising a CDMA pilot signal associated with one of the other, non neighboring base stations that using for controlling power, hand off (Fig 2, Ref 24 is array antenna, ref 78 is used to receive a report signal which associated with a downlink beacon; this beacon only use for determining the phase and gain; See col. 5, lines 41-58); transmit weight processor for coupling to the receiving circuit for determining a weight set must be applied to a downlink signal based on the report signal (Fig 2, Ref 82 and 76 and 70). Schorman does not fully discloses each test pilot downlink signal comprising a CDMA pilot signal associated with one of other base stations. However, Schorman discloses the base station transmits a beacon pilot signal, which has a different PN offset from the pilot signal of the sector (See col. 5, lines 42-58 wherein the beacon signal is offset from the pilot signal of the sector wherein each sector has a pilot signal which is differently from the pilot signal of the other sector based on its offset which is not a neighbor of

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the base station by transmitting first of plurality of downlink signals and second of plurality of downlink signal after the first with a different PN offset). In the same field of endeavor, Moore discloses each test pilot downlink signal comprising a CDMA pilot signal associated with one of other base stations which is non neighboring base station used to transmitting on source base wherein the one of the other base stations being sufficiently spatially separated from the base station to not produce interference between the base station and a subscriber unit (See col. 2, lines 39-56).

Since, Schorman suggests the use of a pilot signal of the other sector on the source sector. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to apply a method and system for transmitting the pilot signal of the target sector on the carrier frequency of the source sector as disclosed by Moore into the system and method of Schorman. Even without, Moore, one of ordinary skill in the would have been recognized that the source sector of Schroman uses the pilot signal of another sector can be applied into source base and target base because the IS-95 CDMA discloses that each base or sector or cell is associated with a pilot signal which is only different in PN offset "512 PN offset for using the cell or sector or base". The motivation would have been to prevent a drop call.

Regarding claims 20-23 and 43-46, Schorman discloses a transmit circuit, coupled with the transmit weight processor, to apply the determined weight set to beamform a downlink signal which is a data and a CDMA pilot signal used by the base station and a pilot signal generator for generating a plurality of test pilot signals (Fig 2, Ref 62, Ref 70 is data signal and ref 72 is for generating pilot signals).

Response to Arguments

6. Applicant's arguments filed 2/25/04 have been fully considered but they are not persuasive.

The applicant's arguments are not applicable to the claims 19-23 and 43-46 because the applicant argues based on claims 1, 10, 24 and 33. Therefore, Schorman and Moore disclose a receiving circuit for receiving the report signals which includes a test pilot signal from a plurality of base stations such the pilot signal of the remaining set in order to move them to neighbor set as set forth in the final rejection.

Allowable Subject Matter

7. Claims 1-18, 24-26, 28-35 and 37-41 allowed.

Conclusion

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

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however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Steven HD Nguyen whose telephone number is (703) 308-8848. The examiner can normally be reached on 8-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Huy D Vu can be reached on (703) 308-6602. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Steven HD Nguyen
Primary Examiner
Art Unit 2665
4/29/04